

What is claimed is:

1. A method for selecting pigs with thin backfat thickness, which comprises the step of identifying a polymorphism characterized by nucleotide position 393 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype of T/T at said position 393 indicates the pig with thin backfat thickness.

2. A method of Claim 1, wherein said pigs are selected from the group consisting of Duroc, Landrace and Yorkshire.

3. A method of Claim 1, which further comprise the step of identifying a polymorphism characterized by nucleotide position 250 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype AT/AT at positions 250 and 393 indicates the pig with thin backfat thickness.

4. A method of Claim 3, which further comprises the step of identifying a polymorphism characterized by nucleotide position 44 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype CAT/CAT at position 44, 250 and 393 indicates the pig with thin backfat thickness.

5. A method of Claim 4, which further comprises the step of identifying a polymorphism characterized by nucleotide position 232 of the

5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype CCATT/CCATT at position 44, 232, 250, 345 and 393 indicates the pig with thin backfat thickness.

6. A method for selecting the pigs with increased feed efficiency, which comprises the step of identifying a polymorphism characterized by nucleotide positions 44, 250 and 393 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype of CAT/CAT or CAC/AAC at positions 44, 250 and 393 indicates the pigs with increased feed efficiency.

7. A method of Claim 6, which further comprises the step of identifying a polymorphism characterized by nucleotide position 232 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotypes of CCATT/CCATT or CCATC/AAACC at positions 44, 232, 250, 345 and 393 indicates the pigs with increased feed efficiency.

8. A method of Claim 6, wherein said pigs are selected from the group consisting of Duroc, Landrace and Yorkshire.

9. A method for selecting pigs with reduced AGE, which comprises the step of identifying a polymorphism characterized by nucleotide positions 250 and 393 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotype of -C/AC at positions 250 and 393 indicates the pigs with reduced AGE.

10. A method of Claim 9, which further comprises the step of identifying a polymorphism characterized by nucleotide position 44 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotypes of C-C/CAC at positions 44, 250 and 393 indicates the pigs with reduced AGE.

11. A method of Claim 9, which further comprises the step of identifying a polymorphism characterized by nucleotide position 232 of the 5'-flanking region of porcine *HSP70.2* gene, wherein the presence of the genotypes of CC-TC/CCATC at positions 44, 232, 250, 345 and 393 indicates the pigs with reduced AGE.

12. A method of Claim 9, wherein said pigs are selected from the group consisting of Duroc, Landrace and Yorkshire.